

CLAIMS

- 1 1. A container for storing an item comprising:
2 an insulating material defining an interior, the insulating material comprising a bio-based
3 polyurethane; and
4 a temperature-maintaining material disposed within the interior, the temperature-
5 maintaining material being arranged to maintain a temperature of an item placed with the
6 interior.
- 1 2. The method of claim 1, further comprising an outer shell located about at least a portion
2 of the exterior of the insulating material.
- 1 3. The container of claim 2, wherein the outer shell has a lid and at least one opening for
2 providing access to the interior, the lid being movable between an open position and a closed
3 position, in the closed position the outer shell encasing the interior, in the open position the lid
4 providing access to the interior.
- 1 4. The container of claim 2, wherein the outer shell and the insulating material comprise the
2 bio-based polyurethane, the polyurethane being configured with a foamed portion and a hardened
3 outer skin, the insulating material corresponding to the foamed portion, the outer shell
4 corresponding to the hardened outer skin.

- 1 5. The container of claim 2, wherein the outer shell comprises cardboard.
- 1 6. The container of claim 2, wherein the outer shell, the insulating material, and the
2 temperature-maintaining material are biodegradable.
- 1 7. The container of claim 2, wherein the outer shell is a portion of a vehicle.
- 1 8. The container of claim 1, wherein the temperature-maintaining material comprises a
2 super-absorbent.
- 1 9. The container of claim 1, wherein the bio-based polyurethane comprises starch.
- 1 10. The container of claim 1, wherein the bio-based polyurethane comprises limestone.
- 1 11. The container of claim 1, wherein the bio-based polyurethane comprises vegetable oil.
- 1 12. The container of claim 1, wherein the bio-based polyurethane comprises castor oil.
- 1 13. The container of claim 1, wherein the bio-based polyurethane comprises soybean oil.
- 1 14. The container of claim 1, wherein the bio-based polyurethane comprises palm oil.

- 1 15. The container of claim 1, wherein the bio-based polyurethane comprises peanut oil.
- 1 16. The container of claim 1, wherein the bio-based polyurethane comprises rap seed oil.
- 1 17. The container of claim 1, wherein the bio-based polyurethane comprises cotton seed oil.
- 1 18. The container of claim 1, wherein the bio-based polyurethane comprises sunflower oil.
- 1 19. The container of claim 1, wherein the bio-based polyurethane comprises linseed oil.
- 1 20. The container of claim 1, wherein the bio-based polyurethane comprises lard.

1 21. A method comprising:
2 providing a container, the container having:
3 an insulating material defining an interior, the insulating material
4 comprising a bio-based polyurethane; and
5 a temperature-maintaining material disposed within the interior, the
6 temperature-maintaining material being arranged to maintain a temperature of an item
7 placed with the interior.

1 22. The method of claim 21, further comprising:
2 placing an item within the interior of the container.

1 23. The method of claim 22, further comprising:
2 transporting the container with the item stored therein.

1 24. The method of claim 23, further comprising:
2 freezing the temperature-maintaining material prior to transporting the container with the
3 item stored therein.

1 25. The method of claim 22, wherein, in transporting the container, the container is
2 transported via ground transportation.

1 26. The method of claim 25, further comprising:
2 cooling the transport volume.

1 27. The method of claim 25, wherein:
2 the method additionally comprises providing a refrigeration unit; and
3 cooling the transport volume is accomplished using the refrigeration unit.

1 28. The method of claim 23, wherein, in transporting the container, the container is located
2 within in a transport volume, the transport volume being defined, at least in part, by an insulating
3 material comprising a bio-based polyurethane.

1 29. The method of claim 21, wherein, in providing a container, the container is a portion of a
2 vehicle that is operative to transport the container with the item stored therein.

1 30. The method of claim 21, wherein at least a portion of the temperature –maintaining
2 material is air; and
3 further comprising cooling at least a portion of the air during transport.

1 31. The method of claim 22, wherein, in providing the container, the container is
2 manufactured in a vicinity of the item.